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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,473	03/02/2004	Yukihito Furuhashi	17507	2100
23389 7590 06/04/2007 SCULLY SCOTT MURPHY & PRESSER, PC 400 GARDEN CITY PLAZA SUITE 300 GARDEN CITY, NY 11530			EXAMINER SAXENA, AKASH	
			ART UNIT 2128	PAPER NUMBER
			MAIL DATE 06/04/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/791,473	Applicant(s) FURUHASHI ET AL.	
	Examiner Akash Saxena	Art Unit 2128	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 4, 6, 10 and 11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 6, 10 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claim(s) 1, 2, 4, 6, 10 and 11 has/have been presented for examination based on amendment filed on 29th January 2007.
2. Claim(s) 1, 2, 4, 6, 10 and 11 is/are amended.
3. Claim(s) 3, 5, 7-9 is/are cancelled.
4. Claim(s) 10 & 11 remain rejected under 35 USC § 101.
5. Claim(s) 1 & 4 remain rejected under 35 USC § 112.
6. Claim(s) 1, 2, 4, 6, 10 and 11 remain rejected under 35 USC § 102.
7. The arguments submitted by the applicant have been fully considered. Claims 1, 2, 4, 6, 10 and 11 remain rejected and this action is made FINAL. The examiner's response is as follows.

Response to applicant's remarks dated 22nd March 2007

8. Applicant has indicated "Since, the Official Action of August 25, 2006, was not a final rejection, the Examiner has no discretion as to whether the amendment of December 26, 2006 is to be entered and must enter the same as a matter of course." Examiner respectfully disagrees; as such a supplemental amendment is not entered as a matter of right (See MPEP 701 (E), Section "F. Non-Compliant Amendments" subsection "(E) A supplemental amendment filed when there is no suspension of action").
9. However as applicant has clarified the position, the amendment dated 29th January 2007 will be entered and response is presented to that action.

Response to Applicant's Remarks & Examiner's Withdrawals

10. Examiner withdraws the objection(s) to the abstract in view of new abstract being submitted by the applicant.
11. Examiner respectfully maintains the claim rejection(s) under 35 USC § 112 first paragraph to claim(s) 1, 10 & 11 in view of the prior art used by examiner. It is acknowledged by applicant that it is known in the art how similarity computation unit uses feature values to compute similarity.
12. Examiner respectfully maintains the claim rejection(s) under 35 USC § 101 to claim(s) 10 & 11 in view of the amendment and/or applicant's arguments.
13. Examiner respectfully maintains the claim rejection(s) under 35 USC § 102 to claim(s) 1, 2, 4, 6, 10 and 11 in view of the amendment and/or applicant's arguments.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

14. Claims 10 & 11 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding Claim 10 & 11

Claims 10 & 11 recite system claims without any tangible means to embody the system. Appropriate tangible embodiment of the system claims is required. E.g. computer processor, storage and display.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

15. Claim 1 & 4 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding Claim 1

Claim 1 discloses phrases like “the each sub-element” and “unit in human recognition” meaning of which is unclear. Unless there is some other interpretation intended the first phrase might be grammatical error. Metes and bounds of the second phrase are unclear, where it is unclear what “unit in human recognition” encompasses.

Regarding Claim 4

Claim 4 discloses the following limitation

The 3D model retrieval method according to claim 2, wherein the lowest level of the hierarchial structure of the 3D model is selected when the user first designates one of the plurality of sub-elements displayed.

It is unclear what designation does in the limitation “user first designates one of the plurality of sub-elements displayed”.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

16. Claim 1, 2, 4, 6, 10 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent Publication No. 2002/0004710 A1 by Takaaki Murao (Murao hereafter).

Regarding Claim 1

Murao teaches a *3D model retrieval method for retrieving a 3D model similar to the specified 3D model from a plurality of 3D models stored in a database* (Murao: [0024][0121]), *the method comprising displaying a 3D model having a hierarchical structure made of a plurality of sub-elements* (Murao: [0056][0057]), *each sub-element corresponding to a unit in human recognition* (Murao: [0026][0027][0029]); *specifying a sub-element of the 3D model as a retrieval key by allowing a user to designate one of the plurality of sub-elements displayed* (Murao: [0044]), *the user being able to change to the level of the hierarchy to which the specification is made with a successive operation* (Murao: [0044]); *acquiring the feature values of the sub-element specified as the retrieval key from the database* (Murao: [0040]); *acquiring the feature values of the sub-elements stored as objects to be retrieved in the database* (Murao: [0121]-[0130],[0067]-[0069] objects for each node); *calculating the similarity between the sub-element specified as the retrieval key and sub*

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elements stored as objects to be retrieved in the database by evaluating the differences of the both of the acquired feature values (Murao: [0037]-[0041]); sorting the results of the calculation of the similarity (Murao: [0040] as selecting the most similar result involves determination for most similar therefore result sorting would be inherent); and displaying a 3D model retrieved based on the result of the sorting (Murao: [0167]-[0168]).

Regarding Claim 2

Murao teaches that the hierarchial structure of the 3D model is a tree structure (Murao: [0040].

Regarding Claim 4

Murao teaches that the lowest level of the hierarchial structure of the 3D model is selected when the user first designates one of the plurality of sub-elements displayed (Murao: [0125]-[0128],[0029] object of the 3D shape node).

Regarding Claim 6

Murao teaches that the 3D model has attribute information corresponding to the sub elements of the 3D model (Murao: [0069]-[0070]), and the displaying the 3D model includes displaying attribute information corresponding to the sub elements of the 3D model at the same time (Murao: [0168]-[0169]).

Regarding Claim 10

Murao teaches a *3-D model retrieval system for retrieving a 3D model from a plurality of 3D models stored in a database by using various feature values calculated from the selected 3D model* (Murao: Abstract; [0001]). Further claim 10 discloses similar limitations as claim 1 and is rejected for the same reasons as claim 1.

Regarding Claim 11

Murao teaches a *3-D model retrieval system for retrieving a 3D model from a plurality of 3D models stored in a database by using various feature values calculated from the selected 3D model* (Murao: Abstract; [0001]). Further claim 11 discloses similar limitations as claim 1 and is rejected for the same reasons as claim 1.

Conclusion

17. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Akash Saxena whose telephone number is (571) 272-8351. The examiner can normally be reached on 9:30 - 6:00 PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini S. Shah can be reached on (571)272-2279. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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